WHAT IS CLAIMED IS:

1. A method of treating a patient suffering from a debilitating or life threatening disease comprising administering at least one autophilic antibody to the patient in an amount effective to alleviate symptoms of the disease.

2. The method of claim 1, wherein a characteristic of the disease is malignancy, auto-immune disorder, transplantation rejection, Alzheimer's disease, or other neuro-degenerative condition.

3. The method of claim 1, wherein the autophilic antibody is administered in one or more dose amounts substantially identical to that practicable for naked antibodies.

4. The method of claim 3, wherein an initial dose is about 250mg per day and a later dose is about 100mg per week.

5. A method of potentiating apoptosis of selected cells in a patient comprising administering to the patient a first autophilic antibody-peptide conjugate and a second antibody directed to the autophilic peptide itself.

6. A method of producing an autophilic antibody by chemical or genetic engineering techniques, wherein the autophilic antibody contains a T15 autophilic peptide sequence (ASRNKANDYTTDYSASVKGRFIVSR) that attaches via a tryptophan photoactivation crosslinking to the immunoglobulin component of the antibody.

7. The method of claim 6, wherein the T15 peptide of the autophilic antibody is crosslinked to a nucleotide affinity site of the immunoglobulin.

8. The method of claim 6, wherein the T15 peptide is crosslinked to a carbohydrate site of the Fc portion of the immunoglobulin.

9. The method of claim 6, wherein the T15 peptide is conjugated to an amino or sulfhydryl group of the immunoglobulin.

10. The method of claim 6, wherein the autophilic antibody is expressed as a fusion protein containing the T15 autophilic sequence.

11. A method of formulating an autophilic antibody composition so as to reduce or mitigate dimerization in solution comprising addition of salt concentrations of 0.5M or more, low levels of SDS, various detergents especially those of an

anionic nature, or modifications of antibody to decrease its isoelectric point as with succinyl anhydride.

12. A method of expressing an increased degree of apoptosis in an *in vitro* assay of an antibody/antigen system comprising employing an autophilic conjugate.

13. A method of identifying an autophilic antibody candidate for use in humans comprising administering the autophilic antibody to SCID or nude mice having human tumor xenografts.

14. A method of determining a peptide sequence for enhanced noncovalent autophilic coupling between antibody molecules: comprising providing a plurality of synthetic peptides each having one or more conservative substitutions at amino acid positions of a template peptide; and comparing self-binding properties of such synthetic peptides relative to those of the template peptide.

15. The method of claim 14, wherein the template peptide is the T15 peptide.

16. A method of producing an autophilic antibody by chemical or genetic engineering techniques, wherein the autophilic antibody contains a modified T15 autophilic peptide sequence that further potentiates the ability of the modified autobody to crosslink once bound to a target antigen relative to the unmodified autobody.

17. A conjugate antibody wherein two or more bioactive peptides are conjugated to different sites of an antibody to potentiate therapeutic efficacy.